



Department of Energy  
Environmental Management  
Procedure



PROJECT ANALYSIS AND REPORTING SYSTEM

EM-1.3  
Revision 0

Prepared:

Kenneth Houser  
Procedure Preparer

10/29/03  
Date

Approved:

Steve Cochran  
Assistant Manager for Environmental Management

10/29/03  
Date

## TABLE OF CONTENTS

TABLE OF CONTENTS .....	2
LIST OF ACRONYMS .....	3
1.0 PURPOSE .....	4
2.0 SCOPE .....	4
3.0 REFERENCES AND DEFINITIONS.....	4
3.1 References .....	4
3.2 Definitions .....	4
4.0 RESPONSIBILITIES .....	5
4.1 EM PARS Program Administrator (PA) .....	5
4.2 HQ-EM PARS Point of Contact.....	5
4.3 Project Manager .....	6
4.4 HQ OEM PARS Administrator .....	6
4.5 EM Program Business Team Leader.....	6
4.6 Assistant Manager for Environmental Management .....	6
5.0 PROCEDURE .....	6
5.1 Initiate Request for PARS Update.....	6
5.2 Review PARS Data for Completeness and Accuracy .....	6
5.3 Review PARS Data for Oak Ridge Environmental Management Program .....	6
5.4 DOE Oak Ridge Approval of PARS Update.....	7
5.5 HQ Change Control.....	7

## LIST OF ACRONYMS

ACWP	Actual Cost of Work Performed
APB	Acquisition Performance Baseline
BCWP	Budgeted Cost of Work Performed
BCWS	Budgeted Cost of Work Scheduled
CAPs	Capital Assets Program
CV	Cost Variance
DOE	U.S. Department of Energy
EM	Environmental Management
HQ	Headquarters
ORO	Oak Ridge Operations
PA	Program Administrator
PARS	Project Analysis and Reporting System
SV	Schedule Variance
TEC	Total Estimated Cost
TPC	Total Project Cost
TPC	Total Project Cost

## 1.0 PURPOSE

The U.S. Department of Energy (DOE) Order O 413.3, Program and Project Management for the Acquisition of Capital Assets, specifies that those Capital Assets Projects (CAPs) that have a Total Project Cost of \$5 million or more must report ongoing status using a newly developed computerized reporting system, Project Analysis and Reporting System (PARS). This Oak Ridge Operations Office (ORO) Office of Environmental Management (EM) procedure is written to formalize the steps that must be taken by EM management and staff to ensure that information related to project performance is provided to Headquarters (HQ) promptly and accurately using PARS.

## 2.0 SCOPE

This procedure applies to all ORO-EM management, staff, and contractors that work on CAPs. With the exception of the EM PARS Program Administrator, standard access to PARS at ORO will be "Read-only." This means that in most instances an interested individual will have access to the system to review and use system information (view data, design and run reports, perform trend analyses, etc.). Read Only users are not authorized to input or edit data in the PARS database.

The HQ OEM PARS Administrator and the EM PARS Program Administrator have additional privileges to grant access by creating new users. The HQ OEM PARS Administrator and EM PARS Program Administrator are authorized to input, save, accept, and change data in the PARS database.

## 3.0 REFERENCES AND DEFINITIONS

### 3.1 References

- 3.1.1 Project Assessment and Reporting System (PARS) User Manual Version 2.7b
- 3.1.2 DOE Order 413.3, Program and Project Management for the Acquisition of Capital Assets

### 3.2 Definitions

- 3.2.1 **PARS** – Project Assessment and Reporting System. PARS is a web-enabled distributed database. PARS is a project management tracking and control system.
- 3.2.2 **Earned Value** –A method for measuring project performance. It compares the value of work performed with the value of work scheduled and the cost of performing the work for the reporting period and/or cumulative to date.
- 3.2.3 **Actual Cost of Work Performed (ACWP)** – Total costs incurred (direct or indirect) in accomplishing an identified element or scope of work during a given time period.
- 3.2.4 **Acquisition Performance Baseline (APB)** – Includes all cost, schedule, and performance parameters (both objectives and thresholds) for a program/project. It represents the DOE commitment to Congress to assess Total Project Cost (TPC). Key elements in formulating an APB include the integration and assessment of program/project scope, schedule, and cost baselines; a systematic risk analysis, and the development and inclusion of adequate risk allocation to address factors that might

cause technical/schedule/cost growth during project performance. Project completion without an increase in the APB thresholds or extending the schedule, is the primary measure of success in formulating the APB.

- 3.2.5 **Budgeted Cost of Work Performed (BCWP)** – The sum of the approved cost estimates (including any overhead allocation) for activities (or portions of activities) completed during a given period (usually project-to-date).
- 3.2.6 **Budgeted Cost of Work Scheduled (BCWS)** The sum of the approved cost estimates (including any overhead allocation) for activities (or portions of activities) scheduled to be performed during a given period (usually project-to-date).
- 3.2.7 **Cost Variance (CV)** – It is the algebraic difference between earned value and actual cost (Cost Variance= Earned Value – Actual Cost). A positive value indicated a favorable position and a negative value indicates an unfavorable condition.
- 3.2.8 **Schedule Variance (SV)** – A metric for the schedule performance on a program. It is the algebraic difference between earned value and the budget (Schedule Variance = Earned Value – Budget). A positive value is a favorable condition while a negative value is unfavorable. The SV is calculated in dollars or work units and is intended to compliment network analysis, not supercede or replace it.
- 3.2.9 **Total Estimated Cost (TEC)** – Is the specific cost of the project, whether funded as an operating expense or construction. It includes the cost of land and land rights; engineering, design, and inspection costs; direct and indirect construction costs; and the cost of initial equipment necessary to place the plant or installation in operation, whether funded as an operating expense or construction.
- 3.2.10 **Total Project Cost (TPC)** – Consists of all the costs included in the Total Estimated Cost (TEC) of a project plus Other Project Costs (OPC) such as pre-construction costs, that include conceptual design and research and development, as well as costs associated with the pre-operational phase, such as training and startup. In budget terms, it is the sum of the technical baseline, schedule baseline, and cost baseline. It includes all research and development, operating, plant, and capital equipment costs specifically associated with project construction and may, when planned, go up to the point of routine operations.

## 4.0 RESPONSIBILITIES

### 4.1 EM PARS Program Administrator (PA)

Provide written updated information to Project Managers, addressing their responsible data elements to review and markup. PA will enter, edit, delete and accept all project data that are affiliated with the identified Program Office. PARS PA can enter, edit, delete, and accept data for all projects that match specific site program affiliation(s). Program Administrator has the responsibility to maintain the Project Contact(s) information up to date. Program Administrator can accept changes to Project and Program Managers on the Project Contact(s) list.

### 4.2 HQ-EM PARS Point-of-Contact

Provides notification of updates and changes to the PARS Program Requirements (i.e., PARS

User Manual). Provides interpretation and guidance to EM Field Offices regarding HQ requirements.

**4.3. Project Manager**

Responsible for the planning, controlling, and reporting of the project, and for the management of a specific function, budget formulation, and execution of the approved budget. Responsible for reviewing monthly generated reports from the PARS database and provides input and validation.

**4.4. HQ OECM PARS Administrator**

Grants access by creating new users. During the initial rollout of PARS; however, user names, passwords, and their applicable rights will be assigned and distributed by the Technical Support Desk at Project Performance Corporation.

**4.5 Chief Operating Officer for Environmental Management (COO)**

Reviews the final version of all PARS data prior to the EM PA formally accepting the data electronically in the PARS database at the end of each month.

**4.6 EM Program Business Team (BMT) Leader**

Reviews the final version of all PARS data prior to the EM PA formally accepting the data electronically in the PARS database at the end of each month along with the COO.

**5.0 PROCEDURE**

This Procedure provides a detail process and accountability of how the PARS data elements are reviewed, inputted and approved. See Figure 1 on Page 8 of 8.

**5.1 Initiate Request for PARS Update**

5.1.1 On the 15<sup>th</sup> Workday, ORO PARS Administrator will provide each Project Director with a copy of the previous monthly PARS report and also the current reporting month of cost and milestone information

**5.2 Review PARS Data for Completeness and Accuracy**

5.2.1 Project Director will review the provided package of information from the EM PA and determine markup changes and prepare a monthly status statement for input and return to PA on the 19<sup>th</sup> Workday

5.2.2 During Review Process Project Director will evaluate the CPI/SPI ratings and determine the range limits (based on the PARS database limits) to ensure that a variance explanation is written if the ratings are in the red or yellow rating.

### **5.3 Review PARS Data for Oak Ridge Environmental Management Approval**

- 5.3.1 On the 20<sup>th</sup> workday the EM PA will input the provided review information from the Project Director. The EM PA will generate a 2<sup>nd</sup> report for 2<sup>nd</sup> review to Project Directors.
- 5.3.2 On the 22<sup>nd</sup> workday the PA will provide EM Business Management Team Leader and Environmental Management Chief Operating Officer a copy of the PARS 2<sup>nd</sup> report to ensure Oak Ridge Management is assured of accuracy of information.
- 5.3.3 PA will also at this point initiate a HQs Change Control Form (based on the HQs Change Control Process) if so needed for any of the PARS Projects.

### **5.4 DOE Oak Ridge Approval of PARS Update**

- 5.4.1 On the 23<sup>rd</sup> workday the PA will make final acceptance of PARS data after receiving a written approval from the COO and BMT Leader.

### **5.5 HQs Change Control**

- 5.5.1 Threshold exceeded in DOE Order 413.3, Attachment 5 will require designated approval authority before PARS is updated

## PARS PROCESS FLOW

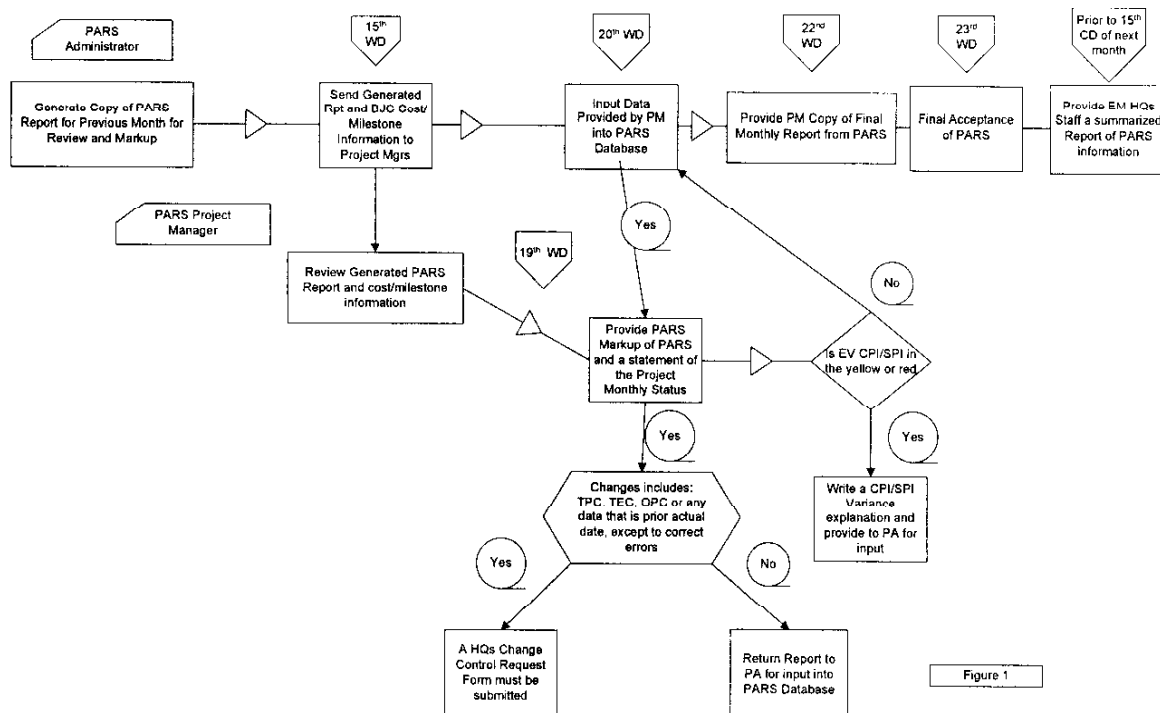


Figure 1